

IN THE CLAIMS:

Please amend claims 1-9, **and add** new claims 10-12, as shown in the complete list of claims that is presented below.

1. (currently amended) A semiconductor device, comprising:
a transistor; and
~~surge absorption element~~ a vertical diode formed in a diode well on the same substrate as the transistor and connected in parallel with said transistor,
wherein said ~~surge absorption element~~ fulfills ~~first and second conditions~~, said ~~first condition being that said surge absorption element~~ diode has a resistance during breakdown operation of said diode that is smaller than a resistance of ~~the surge absorption element~~ said transistor during breakdown operation of said transistor, ~~[[and]]~~
~~said second condition being that~~ wherein a secondary breakdown current of said ~~surge absorption element~~ diode is larger than a secondary breakdown current of said ~~transistor~~ transistor, and
wherein said diode has a breakdown voltage that is established at a desired value as a function of a junction depth of said diode, an impurity concentration in said well, a resistivity of said substrate, and a thickness of said substrate.
2. (currently amended) The semiconductor device according to claim 1, wherein the secondary breakdown voltage of said ~~surge absorption element~~ diode is smaller than the secondary breakdown voltage of said transistor.

3. (currently amended) The semiconductor device according to claim 1, wherein the breakdown voltage of said ~~surge absorption element~~ diode is smaller than the breakdown voltage of said transistor.

4. (currently amended) The semiconductor device according to claim 3, wherein the secondary breakdown voltage of said ~~surge absorption element~~ diode is smaller than the secondary breakdown voltage of said transistor.

5. (currently amended) The semiconductor device according to claim 1, wherein the secondary breakdown current of said ~~surge absorption element~~ diode is larger than a surge current flowing to said diode, ~~surge absorption element~~.

6. (currently amended) The semiconductor device according to claim 1, wherein said transistor is a lateral MOSFET and said ~~surge absorption element~~ diode is a Zener diode.

7. (currently amended) A semiconductor device, ~~constituted by a plurality of transistors~~, comprising:

a transistor;

an input terminal;

an output terminal;

a voltage source terminal; and

a surge absorption element that protects the transistor, the surge absorption element being ~~[[is]]~~ provided in ~~at least one of~~ a circuit location between the input

terminal and voltage source terminal, a circuit location between the output terminal and voltage source terminal, ~~[[and]]~~ or a circuit location between the voltage source terminal and ground;

wherein the surge absorption element and ~~[[each]]~~ the transistor ~~satisfies at least one~~ satisfy all of the following relationships:

the surge absorption element has a resistance during breakdown operation of the surge absorption element that is smaller than a resistance of the ~~surge absorption element~~ transistor during breakdown operation of the transistor,

a secondary breakdown current of the surge absorption element is larger than a secondary breakdown current of the transistor,

the secondary breakdown voltage of the surge absorption element is smaller than the secondary breakdown voltage of the transistor,

the breakdown voltage of the surge absorption element is smaller than the breakdown voltage of the transistor, and

the secondary breakdown current of the surge absorption element is larger than a surge current flowing to the surge absorption element.

8. (currently amended) The semiconductor device of claim 1, wherein said substrate has a resistivity ranging from about 0.3 Ωcm to about 10 Ωcm at a location where said ~~surge absorption element~~ diode and said transistor are fabricated.

9. (currently amended) The semiconductor device of claim 1, wherein said ~~surge absorption element~~ diode occupies in an area on said substrate that is not substantially larger than is necessary in order for ~~said surge absorption element to fulfill said first and~~

~~second conditions:~~ the resistance of said diode during breakdown operation of said diode to be smaller than the resistance of the transistor during breakdown operation of the transistor, and for the secondary breakdown current of said diode to be larger than the secondary breakdown current of said transistor.

10. (new) The semiconductor device of claim 7, wherein the transistor and the surge absorption element are fabricated on a substrate, and wherein said substrate has a resistivity ranging from about 0.3 Ωcm to about 10 Ωcm at a location where said surge absorption element and said transistor are fabricated.

11. (new) The semiconductor device of claim 7, wherein the transistor and the surge absorption element are fabricated on a substrate, and wherein said surge absorption element occupies in an area on said substrate that is not substantially larger than is necessary in order for said surge absorption element to fulfill said relationships.

12. (new) The semiconductor device of claim 7, wherein the surge absorption element is a vertical diode that is formed in a diode well, said diode having a breakdown voltage that is established at a desired value as a function of a junction depth of the diode, an impurity concentration in the well, a resistivity of a substrate on which the diode and the transistor are fabricated, and the thickness of the substrate.